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ABSTRACT

Systematically developed, objective-based, teacher-administered instructional programs are becoming increasingly available, but teachers need to be trained in their proper use. This report describes the development of a 4-hour teacher training session for SWRL's First-Year Communication Skills Program, intended to remedy the 1968-69 situation, when it was found that teacher-training via the district supervisor and a teacher's manual was inadequate for many teachers. The general areas leading to better teacher orientation were determined and then broken down into specific training objectives, based on what teachers should be able to do to promote pupil performance. A trial-revision sequence was employed, with changes made in accordance with developmental test data, and a teach-test-remediate-retest model of instruction, called the unit instructional sequence, was specified as the key to the training objectives. Each unit had an activities and materials guide to determine daily objectives and locate materials. A daily assessment sheet enabled the teacher to test individually a random sample of her class each day and thus evaluate the performance of the whole class. The training package was used by five district supervisors with about 50 teachers. It was found that district personnel could implement the training satisfactorily with a minimum of time and supervisory responsibility. (MBM)





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Developing Exportable Teacher Training for Criterion-Referenced Instructional Programs

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DEVELOPING EXPORTABLE TEACHER TRAINING FOR CRITERION-REFERENCED INSTRUCTIONAL PROGRAMS

Fred C. Niedermeyer<sup>1</sup>

Systematically developed, objectives-based, and teacher-administered instructional programs are becoming increasingly available to schools. This development has implications for orienting and training teachers. The role of the teacher is changing to that of a teacher-manager, and the success of new programs will be a function of the extent to which teachers are able and willing to perform the required instructional and management tasks.

This report describes the development of a 4-hour teacher training session for one such instructional program—SWRL's First-Year Communication Skills Program. Aspects of the development procedures which have general applicability for the preparation of teacher training for similar instructional programs are also detailed.

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### IS EXPORTABLE TEACHER TRAINING NECESSARY?

It has sometimes been assumed that teachers, given quality-verified instructional materials, need no further training beyond that which they already have. The Laboratory's experiences, however, do not support this assumption, even when attempts have been made to make special teacher orientation and training unnecessary.

The 1968-69 tryout of the SWRL First-Year Communication Skills Program did not include systematic teacher orientation. Supervisors in five school districts were responsible for orientating approximately 60 teachers. These supervisors had previously participated in a 1-day workshop at the Laboratory. In addition to the orientation, the teachers received from their supervisors a 30-page teacher's manual describing all the materials and procedures for the Communication Skills Program.

After a semester of reading instruction during the year-long tryout, SWRL personnel administered a mid-term test to a random sample
of eight pupils in each of 20 classes. This sample in each class
was then used to estimate the class mean. The test consisted of both
selected and constructed items that sampled the Communication Skills
Program objectives. The class mean scores on this test are shown in
Table 1. It can be seen that the variability between class means is
quite large, with many of the means unacceptably low. Since the pupils
tested were from a fairly homogeneous district, it appeared that much
of the variability between classes could be attributed to differences
in the instructional procedures of the teachers. It further appeared
that existing teacher training (via the district supervisor and the
teacher's manual) was inadequate for many of the teachers.

To test these inferences empirically, observation was conducted to determine the extent to which the classroom instruction of the teachers in these 20 classes was consonant with the procedures prescribed in the teacher's manual. Nine of the teachers were systematically observed during a Communication Skills lesson. SWRL observers recorded the instructional interaction using specially developed scales. The following data were obtained:

- In five out of nine classes, less than one-third of the pupil responses were relevant to the outcomes for the particular lesson being taught.
- The mean response rate was only 4 per minute, or about 1 every 15 seconds.
- One teacher elicited only choral responses, never individual responses.



Table 1
Class Means on Mid-Term Test in 20 First-Year Communication Skills Classes

Class	Class Mean (Percent Correct)
1	93
2	82
3	74
4	77
5	76
6	76
7	67
8	73
9	62
10	64
11	60
12	70
13	90
14	65
15	57
16	79
17	65
18	78
19	75
20	69
•	Total 73

- Forty percent of the pupils were never called upon to make an individual response.
- Teachers confirmed correct responses only half of the time.
- Teachers made a praising statement only about once every six minutes.
- When pupils were incorrect or did not respond, teachers told the child the correct answer and then had him repeat it only 56% percent of the time.
- Only 6 of 34 prompts were successful, i.e., the pupil followed with the correct response.

Throughout the year, information from other sources also indicated the need for more substantial teacher orientation and training. From responses to questionnaires, it was found that teachers generally felt unprepared for various management tasks such as administering tests, recording scores on Laboratory forms, and completing weekly logs for their supervisors. From the field visit reports filed by Laboratory personnel who visited classrooms, it appeared that many teachers were mispronouncing the initial consonant sounds to be taught in the program, and that they were teaching the children incorrect methods of word attack. (Word attack skills comprise sounding new words composed of previously learned word elements.)

i

It was concluded that a systematic teacher training program would be useful, and the decision was made to begin development in time for the 1969-70 tryout of the Communication Skills Program. Consistent with the Laboratory's mission to produce exportable instruction, the teacher training was to be such that district personnel could implement it without the presence of Laboratory staff, i.e., it was to be exportable.

# FORMULATING THE TRAINING PROGRAM

# DEVELOPING GENERAL OBJECTIVES

The first requirement for formulating the program was a clear specification of what teachers should be able to do to successfully implement the Communication Skills Program. However, one does not simply sit down and write detailed training requirements in this manner.

Instead, the objectives of the teacher training program evolved in a tedious and irregular progression from general boundaries to

precise specifications. Initially, the following general areas were determined as leading to better teacher orientation.

- Program Rationale. Since the criterion-referenced instructional system is new for most teachers, the rationale of such a program needed to be explained in a way conducive to positive affect and acceptance.
- Instructional Management System. Procedures for the teachtest-remediate-retest decision making sequence needed to be clearly specified.
- General Instructional Procedures. The teacher observation data previously discussed implied that it was necessary to include in the training such general instructional principles as provision of practice directly relevant to the program objectives and confirmation of pupil responses.
- Materials-Related Procedures. The training program needed to include specific procedures for teachers to follow when using the program's instructional materials or assessment materials.
- Program-Related Content. The field visit data indicated teachers needed training in the pronunciation of word elements and phonetic blends used in the reading program.
- Record Keeping. Part of the reading program consisted of two computer scanable forms. These were to be completed weekly by the teachers for Laboratory use. Instruction on this task also had to be included in the planned training program.

## DEVELOPING SPECIFIC OBJECTIVES

The next phase of planning required breaking down the general areas into specific training objectives. Prior to this, however, an instructional management system had to be delineated. Until this was done—until it was stated precisely what a teacher should do during each unit—it was impossible to formulate specific training objectives. The management system that evolved, called the Unit Instructional Sequence (Figure 1) describes the teach—test—remediate—retest cycle that teachers follow during each unit of the Communication Skills Program. It may also be generalizable to other criterion—referenced instructional programs, and is discussed in some detail because it illustrates the high degree of specificity that must be obtained before beginning development on the actual training material.



# UNIT INSTRUCTIONAL SEQUENCE

#### INITIAL INSTRUCTION

- 1. Find the Procedure Card and the materials for the first skill from column 1 of the Activities and Materials Guide for the unit. (Procedure Cards are symbol-coded on the Guide contained in the Flashcard File Box.)
- 2. Provide group instruction on the skill, following the appropriate Procedure Card. Instruct daily on as many skills as time allows.
- 3. <u>Conduct daily assessment</u> on each skill taught during the day. Use the procedures from the Daily Assessment Sheet.
- 4. Determine whether additional practice is needed each day:

If yes, on the same day or the following day conduct one activity for each skill on which additional practice is needed, using the procedures on the back of the appropriate Procedure Card. Then return to Step 1 above and follow Steps 1-4 with the next skill(s).

If not, return to Step 1 above and follow Steps 1-4 with the next skill(s).

# INITIAL CRITERION EXERCISE

- 1. Administer the Criterion Exercise to all pupils when Initial Instruction for all skills in the unit has been completed.
- 2. Score the Criterion Exercise.
- 3. Record the scores on the Class Record Sheet.
- 4. Award Good Work Badges to all students who scored 18 or above.
- 5. Determine whether more than half the class scored 18 or above:

If yes, start the next unit. Provide Second Instruction for those who need it on the preceding unit concurrently with instruction on the new unit.

If no, go on to Second Instruction with the entire class.\*

When using the strategy, total time for the Second Instruction and Criterion Exercise Retest should not exceed one week.

# Figure 1 -- Continued

### SECOND INSTRUCTION

- 1. Check the scores for Outcome 1 on the Class Record Sheet.
- 2. Administer Practice Exercise "a" for the unit to all students with scores of less than 5 on Outcome 1. Follow the procedures described on the Procedure Card for Practice Exercises.
- 3. Repeat Steps 1 and 2 above for Outcome 2, 3, and 4 using Practice Exercises <u>b</u>, <u>c</u>, and <u>d</u>, respectively. Provide additional Second Instruction as needed using flashcards, games, etc.
- 4. (Optional) <u>Send a Practice Exercise home</u> with each child in the class when it is no longer needed for classwork.

# CRITERION EXERCISE READMINISTRATION

- 1. Readminister the Criterion Exercise to those who scored less than 18 on the Initial Criterion Exercise.
- 2. Score the Criterion Exercise.
- 3. Record the scores on the Class Record Sheet.
- 4. Award Good Work Badges to all students who scored 18 and above or who made at least a 3-point gain from the Initial Criterion Exercise.



During the first phase of the Unit Instructional Sequence, initial instruction, the teacher provides group instruction on specific program outcomes. Each unit has an Activities and Materials Guide (Figure 2) that enables the teacher to determine the daily instructional objective and to locate the materials and the Procedure Cards to be used. A sample Procedure Card is contained in Figure 3.

Although teachers have traditionally paced their instruction based on how much material there is to be covered, criterion-referenced programs should require pacing instruction according to how quickly the children learn. It was realized, however, that simply asking teachers to pace in this manner was not enough; they had to be supplied with material and procedures that would enable them to empirically determine how fast the children were learning. Considerable time was spent developing daily assessment procedures for use in the program. The outcome of these efforts was the Daily Assessment Sheet that enables a teacher to individually test a random sample of her class each day. (See Figure 4 for the Assessment Sheet and procedures.) Based on the performance of a random sample of students, the teacher is able to make an inference about the performance level of the class. It is important to note that the assessment sheet randomizes the students for the teacher each day, thereby relieving her from this pedestrian task. Done correctly, the daily assessment takes teachers no more than five minutes.

Following Initial Instruction, the teacher administers the Initial Criterion Exercise. This test is keyed to the objectives of the reading program, and the scores allow the teacher to determine which children have attained the instructional outcomes and which, if any, need remediation (Second Instruction). The teacher is given explicit guidelines for assigning specific remedial materials to individual children. These materials (Practice Exercises) are scripted and can be administered by the teacher to groups of children or by tutors or aides to individual children.

According to the Unit Instructional Sequence, when children have received all prescribed remediation, the teacher readministers the Criterion Exercise. In the previous year's tryout, this retest phase was not a part of the teachers' management system. Teachers simply were told to remediate following the initial criterion test and then go on to the next unit. However, retesting by SWRL personnel during the year indicated that little remediation was taking place. It was found that the mean retest score for initially low-scoring pupils was only 13.8 (69%). This was an improvement of only 0.3 points (6%) over the initial test mean. Thus, to promote more remedial instruction on the part of the teacher, the Unit Instructional Sequence included retesting. It was anticipated that the requiring retest scores from teachers would increase teacher remediation and pupil performance for the following reasons:

# SAMPLE ACTIVITIES AND MATERIALS GUIDE

UN	IT 1		
Skill or Activity	Materials *		Entry Skills
1. Answer the items on the entry skills test correctly.	Entry Skills Test Directions and Record Form Entry Skills Test Packet		
2. Say the names of lower-case and capital letters <u>s</u> , <u>m</u> , and <u>e</u> (when shown each letter and asked to say its name).	Flashcards 19, 13, 5	Δ	Skill 1
3. Follow the directions for marking Letter Naming Exercise 1.	Directions: Letter Naming Exercise 1 Letter Naming Exercise 1		Skill 2
4. Read the words <u>I</u> , <u>Sam</u> , and <u>see</u> .	Flashcards 79, 109, 112 Books 1 and 2		
5. 'Say the sounds made by <u>s</u> and <u>m</u> (when shown each letter and asked to say its sound).	Flashcards 19, 13		
<ol><li>Say compound words, when given the syllables pro- nounced separately.</li></ol>	Oral Word Index (OWI) List 1	$  \diamond  $	,
7. Read the word <u>am</u> .	Flashcard 43 Books 3 and 4	台	
8. Say the letter names <u>a</u> , <u>i</u> , and <u>t</u> .	Flashcards 1, 9, 20	Δ	
9. Follow the directions for marking Letter Naming Exercise 2.	Directions: Letter Naming Exercise 2 Letter Naming Exercise 2		Skills 3 & 8
'After the children have learned the sound made by a letter name and letter sound by asking in varied order does it make?"			
10. Read the word me.	Flashcard 88 Books 5 and 6		
<ol> <li>Say two-syllable words, when given the syllables pro- nounced separately.</li> </ol>	OWI List 2	$\Diamond$	Skill 6
12. Say the sound made by <u>at</u> .	Flashcard 32	Δ	
13. Say one-syllable words beginning with $\underline{s}$ and $\underline{m}$ , when given their sounds pronounced as divided in the OWI.	OWI List 3	$\Diamond$	Skill 11
14. Read the word <u>Mat</u> .	Flashcard 87 Books 7 and 8		
15. The Criterion Exercise for Unit 1 should be given when the children have mastered skills 1-14.	Directions: Criterion Exercise 1 Criterion Exercise Booklet 1 Class Record Sheet (to record scores)	θ	Skills 1-14
The completed Class Record Sheet may be used to identify A Criterion Exercise score of less than 5 for an outcome incinstruction and practice on the outcome. The following mapractice:	dicates that the child can normally benefit	from a	additional
Outcome 1: Words-Practice Exercise 1a Outcome 2: Words Elements-Practice Exercise 1b Outcome 3: Word Attack-Practice Exercise 1c Outcome 4: Letter Names-Practice Exercise 1d		φ	



# SAMPLE PROCEDURE CARD

# THE ORAL WORD INDEX



### MATERIALS:

The Oral Word Index List for the activity called for in the Activities and Materials Guide.

### PROCEDURES:

- 1. Say the first word in the word list, pausing very briefly between its parts as divided in the Oral Word Index.
- 2. Ask the class to say the word that the sounds make.
- 3. Repeat this procedure with all words on the list.
- 4. When you have finished the list, repeat steps 1-3, asking for individual instead of choral responses.
  - When a child responds correctly, make a brief, positive statement
  - positive statement.
    When a child responds incorrectly, tell him the correct response and ask him to repeat it.
  - Give the child who answered incorrectly a chance to respond again later in the lesson.

Beginning with Oral Word Index List 2, gradually extend the interval between the two parts of the words until the parts are separated by a full second.

# PROCEDURES FOR DAILY ASSESSMENT:

No daily assessment for this skill.

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#### PROCEDURES FOR DAILY ASSESSMENT

# AT THE BEGINNING OF THE YEAR:

Write the names of all students in the name column. Use a pencil so that as students leave during the year, you can erase their names and add the names of any new students<sup>1</sup>.

## **EACH DAY:**

- 1. Look at the Activities and Materials Guide to determine the number(s) of the skill(s) taught. Then look at the Procedure Card for each skill to determine whether or not the skill requires assessment. If assessment is required, proceed to Step 2.
- 2. Write the number(s) of the skill(s) to be assessed at the top of the Daily Assessment Sheet for the unit.
- 3. Obtain the flashcards listed for the skill(s) in the Guide.
- 4. If assessing only one skill: Ask all students with a white space in the column of the skill being assessed to read each flashcard. For each pupil, record in the white space a "+" if all cards are read correctly, and a "-" if any cards are read incorrectly.
  - If assessing more than one skill: Assess all students with a white space in the column of the first skill being assessed. Have each of these children read the cards for all skills being assessed. For each skill, record "+" or "-" as above. (For other than the first skill being assessed, you will be marking in shaded squares.)
- 5. Count the number of "-"s in the column(s) and record in the TOTAL MINUSES row.
- 6. For each skill assessed, decide if additional practice is needed:
  - a. If there are fewer than two minuses on a skill, the entire class goes on to the next skill to be taught.
  - b. If there are two or more minuses on a skill, the class should receive additional practice (for suggestions, see back of the Procedure Card for the skill) and be re-assessed. Record this re-assessment in the next blank column. Additional practice and re-assessment should be conducted only once for each skill before going on to the next skill.



<sup>&</sup>lt;sup>1</sup> If you group the class into two or more groups, write in the names by group and use a separate Daily Assessment Sheet for each group. When you begin to run out of Daily Assessment Sheets, contact your supervisor who will order more from SWRL.

Figure 4 (Continued)

PUPIL NAME  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18  1 1 1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18  2 2 2 3 5 5 5 5 5 5 5 5 6 6 6 6 7 7 7 7 7 7 7 7	
1     1       2     2       3     3       4     4       5     5       6     6       7     7       8     8       9     9       10     10       11     11       12     12       13     13       14     14       15     15       16     16       17     17       18     18       19     19       20     20       21     21       22     22	
2 2 2 3 3 3 3 3 4 4 4 4 4 4 5 5 5 5 5 5 5 6 6 6 6 7 7 7 7 7 8 8 8 8 8 9 9 9 9 9 10 10 10 10 11 11 11 11 11 11 11 11 11	19 20 21 22
3 3 4 4 4 4 5 5 5 5 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7	
4     4       5     5       6     6       7     7       8     8       9     9       10     10       11     11       12     12       13     13       14     14       15     15       16     16       17     17       18     18       19     19       20     20       21     21       22     22       23     23	
5     5       6     6       7     7       8     8       9     9       10     10       11     11       12     12       13     13       14     14       15     15       16     16       17     17       18     18       19     19       20     20       21     21       22     22       23     23	
6     6       7     7       8     8       9     9       10     10       11     11       12     12       13     13       14     14       15     15       16     16       17     17       18     18       19     19       20     20       21     21       22     22       23     23	
7	
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11     11       12     12       13     13       14     14       15     15       16     16       17     17       18     18       19     19       20     20       21     21       22     22       23     23	
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16     16       17     17       18     18       19     19       20     20       21     21       22     22       23     23	
17     17       18     18       19     19       20     20       21     21       22     22       23     23	
18     18       19     19       20     20       21     21       22     22       23     23	
19     19       20     20       21     21       22     22       23     23	
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28     28       29     29       30     30	
30 30	
31 31	
32 32	
33 33	
34 34	
35 35	
36 36	
37 37	
38 38	
38     38       39     39	
40 40	

If total minuses are 2 or more, provide additional practice and reassess. If less than 2, go on to the next skill.



- Teachers would be able to empirically determine the effects of their remedial efforts. If they followed program procedures during Second Instruction, it would be satisfying to see the ensuing improvement.
- Since the teachers were aware that district supervisors and the Laboratory would receive both the initial scores and the retest scores, there was the possibility of a direct consequence for failing to remediate. It was anticipated that this accountability would motivate remediation activity.

The effects of the assessment and the accountability procedures implicit in the Unit Instructional Sequence of the 1969-70 Installation Tryout of the Communication Skills Program are being determined.

These, then, are the types of procedures that had to be outlined for each of the previously stated general areas before specific training objectives could be formulated.

# Teacher Training Objectives

Below are listed the teacher training objectives that were formulated from the previously identified general areas and the Unit Instructional Sequence. They are stated at a rather low level of specificity. From each of these objectives, several highly specific sub-objectives were generated for use in writing developmental tests.

- 1. To respond favorably when asked to state: (1) attitude toward formal reading instruction in kindergarten, (2) attitude toward the Communication Skills Program, (3) the proportion of the class the teacher feels will attain the program outcomes.
- 2. To match program resources (Teacher's Manual, procedure cards, etc.) with questions about where to locate certain types of information, e.g., 'Where would you find a statement of the four program outcomes?"
- 3. To correctly order the procedures composing the Unit Instructional Sequence.
- 4. To distinguish between appropriate and inappropriate stimulus materials and response practice for skill development, given examples of activities for each skill.
- 5. To identify practice situations conforming to individual practice requirements.
- 6. To identify appropriate confirmation and praise statements.



- 7. To identify appropriate procedures for dealing with wrong responses and non-responses.
- 8. To distinguish between desirable and undesirable prompts.
- 9. To distinguish between instructional activities which are likely or unlikely to generate a response rate of at least six responses per minute.
- 10. To pronounce the beginning sounds, ending sounds, and word attack blends contained in the reading program.
- 11. To identify the appropriate Procedure Card, given a skill-activity from the Activity and Materials Guide.
- 12. To complete the daily assessment sheet, given data concerning the outcome of an assessment.
- 13. To identify specific features of Criterion Exercises, including: (1) rational and purpose, (2) format, and (3) administration procedures.
- 14. To perform specific skills including (1) scoring the Criterion Exercises, (2) filling out the Class Record Sheet, (3) prescribing Second Instruction, and (4) filling out the Weekly Log.
- 15. To identify specific procedures for (1) Second Instruction and (2) the Criterion Exercise Retest.

# CHOOSING APPROPRIATE MEDIA AND COMPONENT FORMAT

Figure 5 shows the way in which the teacher orientation was divided into eight distinct components, each with its own objectives and media implications. The main criterion for selection of component format was that they be self-sufficient, i.e., require little or no direct instructional responsibility on the part of the district supervisor. Several types of media were available: synchronized slide-tape with cartoon-style visuals, audio tape, 16mm sound footage of classes in the previous year's tryout, self-instructional workbook packages, and job-aid reference cards. Choosing the appropriate media for each component involved asking questions such as, "Where is action needed?," "Are visuals necessary?" and "Are visuals in the form of slide or film necessary, or would job-aid handouts be better?."

To answer these questions, the task involved in each objective needed analysis. For example, if the objective was that the teacher should be able to fill out a particular data form (objectives 12 and 14), a workbook was developed in which the teacher would actually

Figure 5

FIRST-YEAR COMMUNICATION SKILLS PROGRAM

TEACHER TRAINING COMPONENTS

Com	ponent Title	Objectiv	ve # (see pp. <u>13</u> , <u>14</u> )	
1.	Program Overview	10 min.	Slide-Tape	1
2.	Program Materials and Teacher Manual	20 min.	Audio-Tape as teachers examine manual	2
3.	Introduction to Program Procedures	20 min.	Sound film	1,3,5,6,12,15
4.	Initial Unit Instruction	30 min.	Workbook	11,12
5.	General Instructional Procedures	30 min.	Slide-Tape, response book- let	4,5,6,7,8,9
6.	Criterion Exercises and Second Instruction	45 min.	Slide-Tape and Workbook	13,14,15
7.	Word Attack Skills	30 min.	Slide-Tape, answer sheet	10
8.	The Weekly Log	30 min.	Workbook	14



practice filling out the form. Objective 10, pronouncing program content, required that teachers practice oral responses to a visual stimulus. Thus, the synchronized slide-tape format was selected. General instructional procedures (Objectives 5, 6, 7, 8, 9) were also illustrated and described with a slide-tape. Procedures for specific materials (the Oral Word Index, storybooks, etc.), however, were summarized on job-aid reference cards. It was felt that for Objective 2 (locating various materials and sources of information) the visuals should be the actual materials. Thus, an audio-tape only format was used where teachers looked through the materials as they listened to the tape.

#### DEVELOPING THE SPECIFIC TRAINING COMPONENTS

After tentative decisions were made concerning the objectives of the various training components and the media required, the activity was staffed and specific component development began. To insure that quality-verified training materials resulted, the test-revision model of development was employed. Figure 6 is a flow-chart which was used to structure the development of the Communication Skills Teacher Training, and it may be useful for similar projects. It should be noted that objectives and sample test items are required of the component developer prior to the writing of instructional scripts or materials. Once these are approved and writing begins, a component undergoes two stages, individual and group, of developmental testing (Steps 6 and 12 on the flow chart).

For the Communication Skills Teacher Training Program the subjects for the first testing (Step 6) were usually Laboratory staff who underwent a pretest-read script-posttest cycle of testing. For group testing (Step 12) kindergarten teachers were paid to come to the Laboratory. To test the slide-tape components, the teachers watched a storybook containing rough visuals while a tape of the script was played.

Through the use of this developmental system, considerable testing and revision can be accomplished in a relatively short period of time. (The activity was initiated in early June and was ready for large-scale tryout when school opened in early September.)

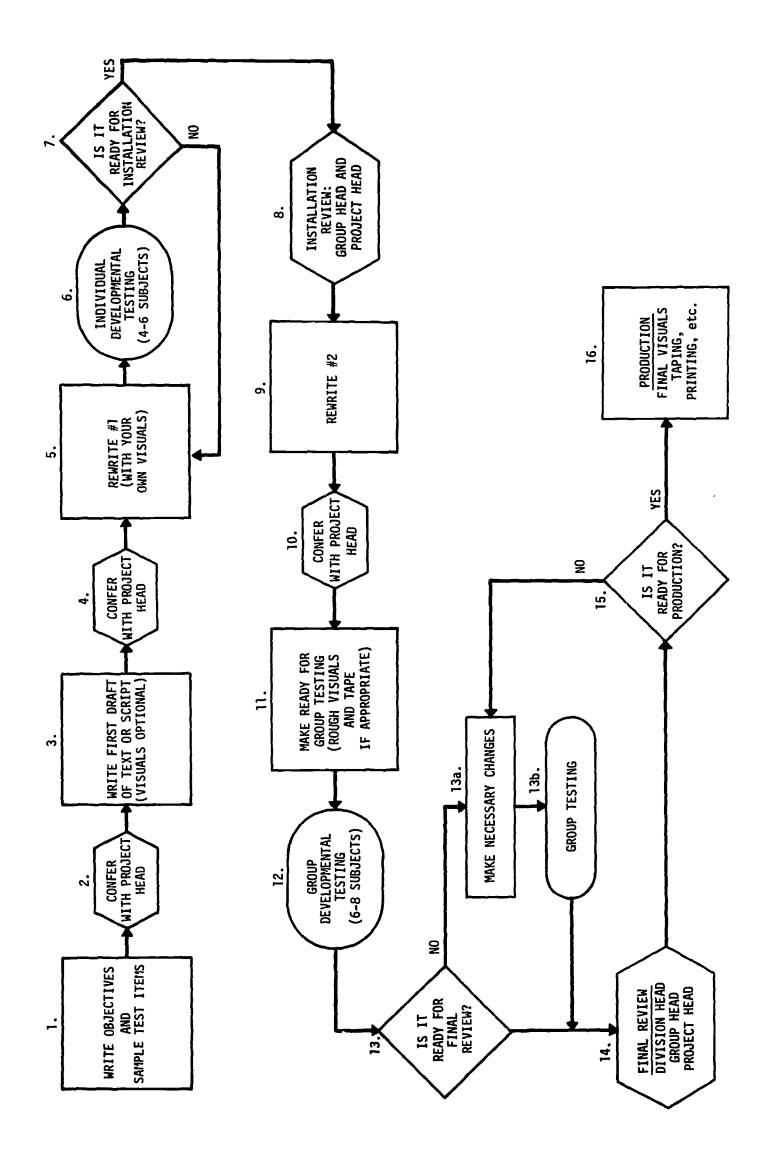
#### INSTALLING THE TRAINING PACKAGE IN A LARGE-SCALE TRYOUT

The SWRL First-Year Communication Skills Teacher Training was used by five district supervisors in training their teachers in connection with the 1969-70 Installation Tryout. A total of about 50 teachers completed the training program during the month of September, prior to beginning instruction with their pupils.



Figure 6

FLOW-CHART FOR DEVELOPMENT OF TEACHER TRAINING COMPONENTS



### THE USER'S GUIDE

1

To make it as easy as possible for supervisors to prepare for and to conduct the teacher training program, a <u>User's Guide</u> was included with the program components. The Communication Skills User's Guide consists of (1) sample agendas to help with scheduling the training program, (2) a procedural checklist to be used when preparing for each day's orientation, (3) suggestions regarding welcomes and introductions at the initial session, and (4) an outline of each component listing the equipment, materials, procedures to be used, as well as a suggested introduction. One of the component outlines from the <u>User's Guide</u> is shown in Figure 7.

#### SUPERVISOR ORIENTATION

Prior to the September 1969 installation of the Communication Skills Program, the supervisors attended a 1-day workshop at the Laboratory. Most of their training was related to program monitoring and data collection procedures. With respect to the teacher training, they were given the <u>User's Guide</u> and were shown most of the training components.

### TEACHER TRAINING

The teacher training sessions in the five districts were attended by Laboratory personnel. These SWRL observers were able to gather several types of data relevant to the evaluation of the training package.

Testing. In two of the largest tryout districts, 30 kindergarten teachers completed post-session tests. Each teacher took one of three parallel tests (Forms A, B, and C) of about 20 items. Each of the three tests sampled the objectives of the training program. The mean score on the tests was 80 percent. An analysis of the errors on the tests provided many implications for revisions of the various components.

Component ratings. Teachers in all five districts completed semantic differential scales for each component. The scales were good-bad, valuable-useless, complete-incomplete, important-unimportant, and simple-complex. In general, teachers found all of the components good, valuable, complete, and important. The only scale on which there was considerable variability was simple-complex. For example, the 16mm film, which required no active responses, was rated as simple, whereas the workbook package providing practice in completing the computer-scanable Weekly Log was rated as complex.



# Component 7: Criterion Exercises and Second Instruction

Time: 50 minutes

Equipment: 1. Carousal 35mm slide projector

2. Tape recorder

3. Screen

4. Table space for completing Workbook Package

Materials: 1. Slide tray #7

2. Tape cassette #7

3. Workbook Package, "Scoring Criterion Exercises and completing Class Record Sheet." (one per teacher)

4. Pencils (for those who need them)

<u>Procedures</u>: 1. Set up slide-tape

2. Give introduction

3. Show slide-tape

4. Pass out Workbook Packages

5. Allow up to 30 minutes for completion of the Workbook

6. Collect Workbooks when teachers are finished as SWRL will want to analyze them for revision purposes. They will be returned to you within a week so that they can be redistributed to teachers to use as references during the year.

# Introduction:

This component presents the procedures for conducting the Communication Skills Program after Initial Instruction has been given for each unit. These procedures include:

- (1) administering the Criterion Exercise, (2) recording the scores of each child on the Class Record Sheet,
- (3) conducting Second Instruction, and (4) re-administering the Criterion Exercise to children who received Second Instruction. The presentation is divided into two parts. First, there is a slide-tape sequence. This is followed by a Workbook Package which provides practice in scoring Criterion Exercises and filling out the Class Record Sheet.

Observer reports. The SWRL observers at the training sessions were able to record anecdotal information useful in evaluating the program. For example, it was reported that all five supervisors apparently were able to implement the program as prescribed in the User's Guide. Naturally, there was some variation among supervisors as to their general enthusiasm and organizational abilities. Yet the general consensus of the observers was that the training treatment was fairly replicable. Based on this, little deviation in teacher performance across the districts is expected.

#### GATHERING FOLLOW-UP DATA

While the data collected during the teacher training sessions are useful, more important sources of information are the extent to which teachers actually employ the training objectives in the classroom and the impact these procedures have on pupil performance. Several procedures are being utilized to tap these sources.

Teachers observation data. A sample of teachers is being observed. Appropriate instrumentation is being developed for recording the teacher-pupil interaction with respect to various instructional procedures. Observational data from the previous year will be used for comparison purposes.

Teacher questionnaires. A questionnaire will be used to determine the extent to which teachers have used these materials and procedures.

Pupil performance data. Pupil performance data represents a primary source of evaluation information. For the Communication Skills Teacher Training the results of unit testing (Criterion Exercises) will be compared to results from previous tryouts. The results of the retesting will be used to evaluat the remedial aspect of the program. Constructed response data will be obtained through individual testing by SWRL personnel at the end of the year. These, too, will be compared with data from previous tryouts.

# SUMMARY

This report has documented the development to date of the SWRL Communication Skills Teacher Training. At the same time, an attempt was made to suggest generality in the developmental procedures used in the activity. In summary, the following points seem to be relevant to the development of teacher training for objectives-based, teacher-administered instructional programs:

- Training components are objectives-based, and these objectives are formulated on what teachers should be able to do to promote criterion pupil performance, not on what people think teachers generally should "know."
- A trial-revision sequence of development is employed, with changes in components made in accordance with developmental test data.
- A teach-test-remediate-retest model of instruction is clearly specified and forms the key source for specifying training objectives.
- Objectives-based, teacher administered instructional programs requires specific training in certain instructional procedures related to stimulus presentation and response consequence.
- The training is exportable so that district personnel can implement it with a minimum of time and supervisory responsibility.
- During large-scale tryout of the program, pupil performance data and teacher observation data form the primary criteria for summative evaluation.